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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,953	08/02/2006	Michael Roberts	Q96287	5705

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EXAMINER	
MAPA, MICHAEL Y	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,953	ROBERTS, MICHAEL	
	Examiner	Art Unit	
	Michael Mapa	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/16/09 has been entered.

Response to Amendment

2. The applicant has amended the following:

Claims: 1 & 9 have been amended.

Claims: 2-8 & 10 have not been amended.

Response to Arguments

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. (US Patent Publication 2005/0085254 herein after referenced as Chuah) in view of Kim et al. (US Patent Publication 2003/0119452 herein after referenced as Kim).

Regarding claim 1, Chuah discloses "An optimization process for radio resources allocated to an MBMS service (Multimedia Broadcast/Multicast Service) broadcast by a source to a group of mobile terminals located in a limited geographic zone that is covered by at least one cellular telecommunication network" **(Fig. 4 & Paragraph [0017] of Chuah, wherein Chuah discloses a cellular network with a group of mobile terminals within coverage of the base station and using MBMS service and increasing cost savings and reducing power requirements).** Chuah discloses "comprising: counting the mobile terminals present in said geographic zone" **(Fig. 3 & Paragraph [0026] of Chuah, wherein Chuah discloses determining the number of users).** Chuah discloses "defining a first criterion representing a minimum level of reception quality by the mobile terminals of the service broadcast in said geographic

zone" **(Fig. 3 & Paragraph [0024] of Chuah, wherein Chuah discloses measuring power to noise ratios and determining if they are below a threshold).** Chuah discloses "defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal" **(Fig. 4 & Paragraph [0022] of Chuah, wherein Chuah discloses the users outside of the threshold region 402 of the cell coverage area 106 having different power requirements as the users that are closer to the base station, therefore a criterion representing a distance between a broadcast source and the mobile terminals).** Chuah discloses "establishing a signalization connection between the cellular telecommunication network and mobile terminals located in a broadcast zone that fulfill the first and second criteria; and transmitting the MBMS service to said mobile terminals" **(Fig. 3 & Paragraph [0026] of Chuah, wherein Chuah discloses delivering the broadcast to the users depending on the respective transmission scheme).**

Chuah fails to explicitly recite "wherein activation and synchronization of said mobile terminals in said shared channel is carried out by said mobile terminals."

In a related field of endeavor, Kim discloses "wherein activation and synchronization of said mobile terminals in said shared channel is carried out by said mobile terminals" **(Fig. 5 & Paragraphs [0074] & [0076]-[0077] of Kim, wherein Kim discloses the UE performing frame synchronization and cell synchronization by receiving a PCPICH (primary-common pilot channel) which is identical to a PBMSCH (physical broadcast multicast shared channel) as well as sending out an**

MBMS request message for a specific service, therefore activation and synchronization is carried out by said mobile terminal).

Therefore it would have been obvious to one of ordinary skill in the art to modify the invention of Chuah to incorporate the teachings of Kim for the purpose of improving system performance by increasing service quality **(Paragraph [0010] of Kim).**

Regarding claim 2, Chuah in view of Kim discloses "A process according to claim 1, wherein said signalization connection is used to count the mobile terminals of a broadcast zone" **(Paragraph [0026] of Chuah, wherein Chuah discloses determining the number of users supported by the transmission scheme).**

Regarding claim 3, Chuah in view of Kim discloses "The process according to claim 2, wherein the process further comprises: fixing a percentage of mobile terminals that should receive the MBMS service" **(Paragraph [0026] of Chuah, wherein Chuah discloses (N – m) users that will be supported by a first transmission scheme and m users that will be supported via a second transmission scheme).** Chuah in view of Kim discloses "broadcasting signals having a determined power level" **(Paragraph [0023] of Chuah, wherein Chuah discloses broadcasting to all multicast users within a given cell coverage area).** Chuah in view of Kim discloses "determining the percentage of mobile terminals that respond to signals that have been broadcast" **(Fig. 3 & Paragraphs [0024] & [0026] of Chuah, wherein Chuah discloses determining the number of users supported by the broadcast based on measured values).** Chuah in view of Kim discloses "as long as a fixed percentage of mobile terminals has not been reached, reducing an emission power level; and if the fixed percentage of

mobile terminals has been reached, broadcasting the MBMS service at the emission power level that has been reached" **(Paragraph [0026] of Chuah, wherein Chuah discloses N-m users (fixed percentage of mobile terminals) using a first transmission scheme and m users using a second transmission scheme. The first transmission scheme broadcast is less than the initial broadcast to all multicast users within the cell coverage area, therefore a reduction of emission power level).**

Regarding claim 4, Chuah in view of Kim discloses "The process according to anyone of claims 1, wherein said cellular telecommunication network is a UMTS network" **(Paragraph [0020] of Chuah, wherein Chuah discloses UTRAN (UMTS Radio Access Network)).**

Regarding claim 5, Chuah in view of Kim discloses "The process according to claim 4, wherein the first criterion that represents the minimum level of reception quality is determined according to a minimum level of received signal code power (RSCP) measured by code indicated by said cellular telecommunication network" **(Paragraphs [0023] & [0004] of Chuah, wherein Chuah discloses measuring the received pilot signal power and continues to disclose a CDMA system, therefore measured by code indicated by said cellular telecommunication network).**

Regarding claim 6, Chuah in view of Kim discloses "The process according to claim 4, wherein the first criterion that represents the minimum level of reception quality is determined according to a signal-to- noise ratio Ec/N0 that is indicated by said cellular telecommunication network" **(Paragraph [0022] of Chuah, wherein Chuah discloses**

the broadcast threshold to be a ratio of the signal power to the interference power and noise density).

Regarding claim 9, Chuah discloses "A mobile terminal aimed at receiving an MBMS service broadcast by a source in a limited geographic zone that is covered by at least one cellular telecommunication network" **(Fig. 4 & Paragraph [0017] of Chuah, wherein Chuah discloses a cellular network with a group of mobile terminals within coverage of the base station and using MBMS service and increasing cost savings and reducing power requirements).** Chuah discloses "comprising: means for establishing connections with said cellular telecommunication network in the cases: in which a reception quality level is below a minimum level defined by said cellular telecommunication network for said zone" **(Fig. 3 & Paragraph [0024] of Chuah, wherein Chuah discloses measuring power to noise ratios and determining if they are below a threshold).** Chuah discloses "and in which a distance between the mobile terminal and the broadcast source for using a shared channel in said geographic zone is greater than a distance established in advance by said cellular telecommunication network" **(Fig. 4 & Paragraph [0022] of Chuah, wherein Chuah discloses the users outside of the threshold region 402 of the cell coverage area 106 having different power requirements as the users that are closer to the base station, therefore a distance established in advance by the cellular network).**

Chuah fails to explicitly recite "wherein activation and synchronization of said mobile terminal in said shared channel is carried out by said mobile terminal."

In a related field of endeavor, Kim discloses "wherein activation and synchronization of said mobile terminals in said shared channel is carried out by said mobile terminal" **(Fig. 5 & Paragraphs [0074] & [0076]-[0077] of Kim, wherein Kim discloses the UE performing frame synchronization and cell synchronization by receiving a PCPICH (primary-common pilot channel) which is identical to a PBMSCH (physical broadcast multicast shared channel) as well as sending out an MBMS request message for a specific service, therefore activation and synchronization is carried out by said mobile terminal).**

Therefore it would have been obvious to one of ordinary skill in the art to modify the invention of Chuah to incorporate the teachings of Kim for the purpose of improving system performance by increasing service quality **(Paragraph [0010] of Kim).**

Regarding claim 10, Chuah in view of Kim discloses "The mobile terminal according to claim 9, wherein the mobile terminal establishes a connection with said cellular telecommunication network when a signal-to-noise Ec/N0 is lower than a level that has been set in advance by said cellular telecommunication network, or when a minimum level of received signal code power RSCP is lower than a preset value" **(Fig. 3 & Paragraphs [0022], [0024] & [0026] of Chuah, wherein Chuah discloses the broadcast threshold to be a ratio of the signal power to the interference power and noise density, and continues to disclose determining the users below the broadcast threshold and using a second transmission scheme for the users below the broadcast threshold).**

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. (US Patent Publication 2005/0085254 herein after referenced as Chuah) in view of Kim (US Patent Publication 2003/0119452 herein after referenced as Kim) and further in view of Lee et al. (US Patent Publication 2004/0146041 herein after referenced as Lee).

Regarding claim 7, Chuah in view of Kim discloses "The process according to anyone of claim 1." Chuah in view of Kim fails to explicitly recite "wherein said cellular telecommunication network is a GSM/GPRS network."

In a related field of endeavor, Lee discloses "wherein said cellular telecommunication network is a GSM/GPRS network" **(Paragraph [0005] of Lee, wherein Lee discloses the UMTS as having been evolved from GSM and is used as the European Standard).**

Therefore it would have been obvious for one of ordinary skill in the art to modify the invention of Chuah in view of Kim to incorporate the teachings of Lee of having a GSM standard for the purpose of increasing marketability by conforming to known standards.

Regarding claim 8, Chuah in view of Kim and further in view of Lee discloses "The process according to claim 7, wherein the first criterion that represents the minimum level of reception quality is determined according to a parameter (RX lev GSM))" (**Paragraph [0023] of Chuah, wherein Chuah discloses measuring the received signal power).**

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Mapa whose telephone number is (571)270-5540. The examiner can normally be reached on MONDAY TO THURSDAY 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Mapa/
Examiner, Art Unit 2617

/Dwayne D. Bost/
Supervisory Patent Examiner,
Art Unit 2617